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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,726	06/28/2001	Tatsuaki Osafune	HITA.0064	4778

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EXAMINER

PATEL, NIKETA I

ART UNIT PAPER NUMBER

2182

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/892,726

Applicant(s)

OSAFUNE ET AL.

Examiner

Niketa I. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/28/01</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

2. The information disclosure statement 06/28/2001 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the applicant failed to provide English language translation for the document numbered: 10-320327. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

### ***Drawings***

3. Figures 12 and 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. The applicant is kindly requested to update the status of Japanese Patent Application listed at paragraph one.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 8, 10, 11, 12, 18-19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tosey et al. U.S. Patent Number: 6,392,990 (hereinafter "Tosey".)

8. **Referring to claims 1, 10, 12, 19,** Tosey teaches the method of switching between network interfaces of a computer and the computer connectable to a network [see figure 3], said computer having an active network interface connected to a router via first networking equipment and a standby network interface connected to said router via second networking equipment, said first networking equipment also connected to an active network interface of another computer, and said second networking equipment also connected to a standby network interface of said another computer, said method comprising the steps of: detecting

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a fault occurring in a path between said active network interface of said computer and said router [see column 3, lines 25-31, 38-44]; changing an Internet Protocol (IP) address assignment from said active network interface of said computer to said standby network interface of said computer [see column 4, lines 61-67 and column 5, lines 1-3 and column 2, 33-46]; and transmitting an Address Resolution Protocol (ARP) request from said standby network interface of said computer to said router to make said router change a Media Access Control (MAC) address registration mapped to said IP address, retained in an ARP cache of said router, from a MAC address assigned to said active network interface of said computer to a MAC address assigned to said standby network interface of said computer [see column 6, lines 46-5, 66-67 and column 7, lines 1-5.]

9. **Referring to claims 8, 11, 18, 20,** Tosey teaches the method of switching between network interfaces of a computer and the computer connectable to a network wherein both said first networking equipment and said second networking equipment are selected from the group consisting of repeater hubs and switching hubs [see figure 3, elements 33,34.]

**Claim Rejections - 35 USC § 103**

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey et al. U.S. Patent Number: 6,392,990 (hereinafter "Tosey".)

12. **Referring to claims 4, 15,** Although, Tosey fails to explicitly set forth the limitation of further comprising the step of: transmitting a network interface switching request packet from said active network interface of said computer to a destination IP address assigned to said active network interface of said another computer in order to make said another computer change the IP address assignment from said active network interface of said another computer to said standby network interface of said another computer; Tosey teaches that if a network device can communicate an IP packet with any one peer on the same IP sub-network, the network interface card and it's connecting cable and hub is considered to be intact. However, it

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is also considered that if a network device cannot communicate with just one of its peers, the problem may not be with the network itself, the problem may exist with the peer device it cannot contact; furthermore Tosey teaches two network devices with an active and a standby network interfaces [see column 5, lines 53-62 and figure 3, elements 31, 32.]

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention that it was old and well known in the computer art to get the advantage of fast recovery from a network fail over by using a standby interface/route. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include network interface switching request to get this advantage.

13. Claims 2-3, 5, 6-7, 9, 13-14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey et al. U.S. Patent Number: 6,392,990 (hereinafter "Tosey") as applied to claims 1, 12 above, and further in view of Beser et al. U.S. Patent Number: 6,754,622 (hereinafter referred to as "Beser".)

14. **Referring to claims 2, 6, 7, 13, 16, 17,** Tosey teaches the method of switching between network interfaces of a computer and a computer connectable to a network wherein said step of detecting a fault further comprises the steps of: transmitting



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an echo request packet from said active network interface of said computer to said router; and determining that a fault occurs in the path between said active network interface of said computer and said router if no response to said echo request packet takes place [see *Tosey* column 3, lines 38-52 and column 6, lines 36-40] however does not set forth the limitation of if no response to said echo request packet takes place within a given time. *Beser* teaches the above limitation in order to determine whether a stale network address of a given network device needs to be deleted from an address table, to prevent failed device from being accessed by other devices in the network [see *Beser* column 32, lines 5-21.]

One of ordinary skill in the art at the time of applicant's invention would have clearly recognized that it is quite advantageous for the method and a network computer of *Tosey* to be able to delete a stale network address to prevent failed device from being accessed by other devices in the network. It is for this reason that one of ordinary skill in the art would have been motivated to implement *Tosey's* invention to use echo message with predetermined response time to be able to delete a stale network address to prevent failed device from being accessed by other devices in the network.

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15. **Referring to claims 3, 14**, teachings of *Tosey* as modified by the teachings of *Beser* above teaches, wherein said given time is preset, and further wherein said given time may be reset by a user during operation of the computer [see *Beser* column 32, lines 5-21.]

16. **Referring to claim 5**, Although, *Tosey* as modified by the teachings of *Beser* above fails to explicitly set forth the limitation of further comprising the step of: transmitting a network interface switching request packet from said active network interface of said computer to a destination IP address assigned to said active network interface of said another computer in order to make said another computer change the IP address assignment from said active network interface of said another computer to said standby network interface of said another computer; *Tosey* teaches that if a network device can communicate an IP packet with any one peer on the same IP sub-network, the network interface card and it's connecting cable and hub is considered to be intact. However, it is also considered that if a network device cannot communicate with just one of its peers, the problem may not be with the network itself, the problem may exist with the peer device it cannot contact. Furthermore, *Tosey* teaches two network devices with an

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active and a standby network interfaces [see column 5, lines 53-62 and figure 3, elements 31, 32.]

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention that it was old and well known in the computer art to get the advantage of fast recovery from a network fail over by using a standby interface/route. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include network interface switching request to get this advantage.

17. **Referring to claim 9**, The method of switching between network interfaces of a computer as recited in claim 6, wherein both said first networking equipment and said second networking equipment are selected from the group consisting of repeater hubs and switching hubs [see figure 3, elements 33,34.]

### **Conclusion**

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents have been made record of to further show the state of the art as it pertains to network interface redundancy to overcome various type of network failures:

Coile et al. US Patent Number: 6,108,300

Hebert, James E. US Patent Number: 6,728,780

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Huang et al. US Pat. App. Pub. No.: 2001/0052084 A1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Niketa I. Patel whose telephone number is (571) 272 4156. The examiner can normally be reached on M-F 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272 4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP  
11/26/2004

  
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